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**UTILITY PATENT APPLICATION TRANSMITTAL**  
**(Only for new nonprovisional applications under 37 CFR 1.53(b))**

922 U.S. PTO  
09/699031  
10/27/00

Docket No. : 40985/DMC/C685  
Inventor(s) : Michael L. Obradovich  
Title : SYSTEM AND METHOD FOR USER NAVIGATION  
Express Mail Label No. : EL521382003US

**ADDRESS TO:** Assistant Commissioner for Patents  
Box Patent Application  
Washington, D.C. 20231

Date: October 27, 2000

1. X **FEE TRANSMITTAL FORM** (*Submit an original, and a duplicate for fee processing*).

## 2. IF A CONTINUING APPLICATION

\_\_\_\_\_ This application is a of patent application No. .

Prior application information: Examiner ; Group Art Unit:

X This application claims priority pursuant to 35 U.S.C. §119(e) and 37 CFR §1.78(a)(4), to provisional Application No. 60/161,860, Filed October 27, 1999.

### 3. APPLICATION COMPRISED OF

## Specification

16 Specification, claims and Abstract (total pages)

## Drawings

16 Sheets of formal drawing(s) (FIGS. 1 to 15)

## Declaration and Power of Attorney

\_\_\_\_ Newly executed

<u>X</u>	Unexecuted declaration
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\_\_\_\_ Copy from a prior application (37 CFR 1.63(d))(for continuation and divisional)

- #### 4. \_\_\_\_\_ Microfiche Computer Program (*Appendix*)

- 5. \_\_\_\_\_ Nucleotide and/or Amino Acid Sequence Submission** (*if applicable, all necessary*)

\_\_\_\_ Computer Readable Copy

Paper Copy (identical to computer copy)

Statement verifying identity of above copies

6. ALSO ENCLOSED ARE

Preliminary Amendment

— A Petition for Extension of Time for the parent application and the required fee are enclosed as separate papers

Small Entity Statement(s)

\_\_\_\_ Statement filed in parent application, status still proper and desired

Copy of Statement filed in provisional application, status still proper and desired

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**UTILITY PATENT APPLICATION TRANSMITTAL**  
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Docket No.: 40985/DMC/C685

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- ☐ An Assignment of the invention with the Recordation Cover Sheet and the recordation fee are enclosed as separate papers
- ☐ This application is owned by pursuant to an Assignment recorded at Reel , Frame
- ☐ Information Disclosure Statement (IDS)/PTO-1449
- ☐ Copies of IDS Citations
- ☐ Certified copy of Priority Document(s) (*if foreign priority is claimed*)
- ☐ English Translation Document (*if applicable*)
- ☒ Return Receipt Postcard (MPEP 503) (should be specifically itemized).
- ☐ Other

**7. CORRESPONDENCE ADDRESS**

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Respectfully submitted,

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626/795-9900

DMC/nml

**FEE TRANSMITTAL  
UTILITY PATENT APPLICATION**

**DATE: October 27, 2000**

Docket No. : 40985/DMC/C685  
Inventor(s) : Michael L. Obradovich  
Title : SYSTEM AND METHOD FOR USER NAVIGATION

**FEE DETERMINATION**


CLAIMS AS FILED					
	NUMBER FILED	NUMBER EXTRA	SMALL ENTITY RATE	LARGE ENTITY RATE	FEE
TOTAL CLAIMS	21 - 20	1	1 x \$9.00	x \$18.00	\$9.00
INDEPENDENT CLAIMS	5 - 3	2	2 x \$40.00	x \$80.00	\$80.00
MULTIPLE-DEPENDENT CLAIMS FEE			\$135.00	\$270.00	\$0.00
BASIC FEE			\$355.00	\$710.00	\$355.00
TOTAL FILING FEE					\$444.00
List Independent Claims: 1, 11, 19, 20, 21					

**METHOD OF PAYMENT**

- ☒ No filing fee enclosed
- ☒ No Deposit Account Authorization.

Respectfully submitted,

CHRISTIE, PARKER & HALE, LLP

By   
Daniel M. Cavanagh  
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## 1                   SYSTEM AND METHOD FOR USER NAVIGATION

## CROSS-REFERENCE TO RELATED APPLICATIONS

5       This application claims the benefit of U.S. Provisional Application No. 60/161,860, filed October 27, 1999, the disclosure of which is incorporated by reference.

## BACKGROUND OF THE INVENTION

10       This invention relates generally to navigation assistance devices, and more particularly to personalized computer-based electronic navigation devices.

15       Individual computers and computerized devices are able to store large amounts of information. With the advent of the Internet and the World Wide Web, a single computer may access information stored in a number physically separated computers using the Internet. With the proliferation of use of the Internet, numerous people, organizations, and entities have made information available to computer users. Many individuals have their own Web pages, and use their Web pages to present  
20       information of interest to them. Many organizations and entities similarly have Web pages describing their organization, purpose, and other information. Thus, individuals are able to access information about a variety of topics, presented by a variety of individuals and entities.

25       In addition, businesses are often supplementing this physical presence by placing information about their goods, services and products on the Web. Indeed many such businesses are solely Web-based. That is, some businesses may not provide a physical location which a customer or shopper may visit, but  
30       instead merely provide a presence on the Web for consumers to access via the Internet. Many businesses, however, combine a physical presence, such as a store site, with information about the store on the Web. Thus, computer users can determine the products, pricing, and other information relating to a store on  
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**Express Mail No.** FM52138200US 3

1 the Web, and determine whether the consumer is interested in  
visiting the store and thereafter visiting the store.

Often the consumer is assisted in visiting the physical  
location of a store by receiving instructions over the Web as to  
5 how to, for example, drive to the location. Mapping services  
available from the Web, upon input of a desired destination and  
a current location, provide driving instructions as to how to get  
from a current destination to a desired location. Thus, it would  
appear that the Web provides a convenient way to learn about  
10 physical locations, such as stores, and how to get to those  
locations.

As discussed above, the amount of information available over  
the Web, is tremendous. The sheer quantity of data available,  
however, also increases the difficulty in finding data desired  
15 by a consumer. Determining which data meets the needs of the  
consumer, as well as convenient presentation of such data,  
provides difficulties. Moreover, even for categories of  
information which appear to fit a consumer's need, some otherwise  
relevant data may not be desired by the consumer. For example,  
20 for certain types of goods a consumer may not wish to frequent  
a particular establishment, or desire to only frequent a few of  
a large number of establishments. Thus, a consumer may be  
presented with data from establishments the consumer has no  
desire to visit, and such information merely clutters the user's  
25 ability to rapidly locate information of interest.

Further, any one consumer may have a variety of interests.  
Such a consumer may not wish the information relevant to one  
aspect of the consumer's activities cluttering up requests for  
information regarding other aspects of the user's activities.

30 In addition, businesses desiring to place information  
regarding their business before certain types of consumers have  
no convenient way to do so. Businesses do not desire to place  
information before consumers who have no interest in their  
business, and that do wish to place information regarding their  
35

1 business before consumers who do or are likely to have an  
interest in the goods the business provides.

In addition, although consumers may be provided information  
on how to get to a business, while enroute the consumers receive  
5 no additional information about points of interest which they may  
be passing. In addition, consumers may realize, while in route,  
that they have a need to obtain other goods or services along the  
route. Such consumers may not have detailed information  
concerning their present location, and no convenient means to  
10 determine the availability of businesses stocking goods which  
they desire or need enroute, or how to reach such businesses.

#### SUMMARY OF THE INVENTION

In one aspect, the present invention provides a real world  
15 navigation system. In one embodiment the invention comprises a  
method of populating a database, including determining a tag  
location, requesting information concerning the tag location and  
providing the information to a computer system. In one  
embodiment determining the tag location comprises evaluating the  
20 position of a GPS capable device, waiting a preselected time  
period, reevaluating the position of the GPS capable device, and  
determining if the position has changed. In another embodiment,  
determining the tag location comprises presenting a map display  
using a computer to a user and receiving a selected position on  
25 the map display.

In alternative embodiments the tag location comprises a  
plurality of locations, and in one embodiment these locations are  
selected area and in another embodiment the locations are a route  
to a destination.

30 In other embodiments, the invention comprises a method of  
accessing a database using a profile. The profile comprises  
information applicable to a user, and serves as a filter between  
the database of information and the display to the user. In  
other embodiments, the profile is used in a push mode to push  
35 information desired by the user to the user, in other embodiments

1 the profile serves as a filter in a pull mode pulling only  
information applicable to the user to the user.

In yet another embodiment the invention comprises an  
entertainment distribution system. The entertainment distribution  
5 system comprises an entertainment server receiving entertainment  
related computer files in a variety of formats. The entertainment  
computer related files are sequenced and organized by a user, and  
may thereafter request from requesting nodes various files or  
sequences of files in a format applicable to their requesting  
10 node.

These and other aspects of the present invention will be  
more readily understood when considered in connection with the  
drawings and the following detailed description.

#### 15 BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 illustrates a block diagram of a system of the  
present invention;

FIG. 2A illustrates a block diagram showing user interaction  
20 with a database of the present invention;

FIG. 2B illustrates a block diagram of an embodiment of a  
database of FIG. 2A;

FIG. 3 illustrates a flow diagram of a process of forming  
profiles to interact with the database of FIG. 2;

25 FIG. 4 illustrates a flow diagram of a process of creating  
profiles;

FIG. 5 illustrates an input screen for creating a profile;

FIG. 6 illustrates an input screen for selecting a default  
profile;

30 FIG. 7 illustrates an input screen for cloning a profile;

FIG. 8 illustrates input screen for editing a profile;

FIG. 9 illustrates a flow diagram of a process for  
populating a database;

FIG. 10 illustrates a navigation screen;

35 FIG. 11 illustrates a roadblocks screen;

1           FIG. 12 illustrates an enroute profile settings screen;  
             FIG. 13 illustrates a tag location screen;  
             FIG. 14 illustrates a block diagram of an entertainment  
 distribution system; and  
 5           FIG. 15 illustrates a process conducted by the entertainment  
 distribution system of FIG. 14.

# DETAILED DESCRIPTION

10           FIG. 1 illustrates a block diagram of a system of the  
 present invention. An Internet service provider (ISP) 11,  
 including a server, is linked to a user personal computer 13 via  
 telephone lines 15. In actuality, one or more computer units may  
 be interdisposed between the PC and the server, with the server  
 being a node on the Internet. The server is also connected via  
 15           communication link to a personal computer device 17. Circuitry  
 to allow the PCD, sometimes in conjunction with external elements  
 or computers, to determine the position of the PCD. For example,  
 in one embodiment the PCD contains circuitry for receiving GPS  
 signals and passing pertinent representations of the received  
 20           signals to a base server for further processing. The base  
 server, in turn, calculates the position of the PCD and transmits  
 the position information to the PCD. Alternatively, the PCD  
 contains a GPS receiver and processing system, and the PCD  
 determines its position using the GPS receiver and processing  
 25           system. In one embodiment, the personal computer device is a PCD  
 of the type disclosed in U.S. Patent Application No. 08/879,955,  
 the disclosure of which is incorporated herein by reference.

            The server includes a database. The database includes  
 information pertaining to a variety of topics. More specifically,  
 30           in one embodiment the database includes information relating to  
 locations. That is, the database includes information regarding  
 specific locations, as well as information pertaining to  
 transportation to and from these locations.

            The information in the database is provided by businesses,  
 35           individuals, and users of PCDs. Thus, the database contains



1 general information provided by businesses, stores, and other  
commercial entities who wish to make information concerning their  
business available to others. The database also contains  
personalized information regarding points of interest and other  
5 matters provided by users of PCDs. The database therefore  
provides a source of information to the users of PCDs.

In accordance with the present invention, therefore, users  
are provided profiles to assist on the search of the database.  
This is shown in block diagram form in FIG. 2A. As illustrated  
10 in FIG. 2A, a first user 31 accesses a database 33 using a first  
profile 35. The profile includes information pertaining to the  
user. For example, the profile may contain information relating  
to restaurants the user prefers, businesses the user prefers to  
frequent, locations that the user desires to reach, or routes the  
15 user has marked an interest or other matters.

In effect, the profile serves as a filter between the  
database and the user. The information retrieved from the  
database that the users request is provided to the user based on  
aspects the user has entered into the profile.

20 The user may utilize more than one profile. This is  
illustrated by a second user 37. The second user accesses the  
database using a second profile 36 and a third profile 41. The  
second profile is similar to the first profile in that the second  
profile contains information pertaining to the specific user. The  
25 third profile differs in that the third profile is a standard  
profile. In other words, the third profile is a standardized  
profile made available for selection by users so that users may  
avoid the necessity of creating their own profile.

The use of multiple profiles is beneficial in that users  
30 may, depending on their activities, require different information  
of a different nature at different times. For example, a user may  
desire information of a first type relating to the users business  
activities. This may be due to the user working at a locale,  
with the result that the user desires information pertaining to  
35 the region of the locale while at work. In addition, the user

1 may frequent certain types of businesses as part of work related activities, whereas the user may frequent different types of businesses during the user's leisure hours.

5 In addition, profiles may be copied. Copying of profiles is beneficial as the copied profile may be thereafter edited or added to, or have other operations under the profile. A user having a copied profile is illustrated by a third user 41. The third user accesses the database using a fourth profile 47, a fifth profile 45 and a copied sixth profile 43. The fourth and  
10 fifth profiles are, like the profiles of the first and second users, profiles pertaining to the individual user. The copied sixth profile of the third user is a copied version of the fifth profile. When created, therefore, the sixth profile is merely a copy of the fifth profile. Over time, however, the user may  
15 adjust and adapt the copied profile to suit other needs. This allows the user to use the information contained in the original profile, but allows modification to meet specific needs of the user.

FIG. 2B illustrates a data layout of one implementation of  
20 a database in accordance with the present invention. The database 21 includes plurality of memory elements. The plurality of memory elements includes subgroupings of memory elements. A three such subgrouping of memory elements are illustrated as a first subgrouping 23, a second subgrouping 25, and a third subgrouping  
25 27. As illustrated in FIG. 2B, the first, second, and third subgroupings of memory correspond to areas of memory reserved for information for the first profile, second profile, and third profiles illustrated in FIG. 2A. Thus, in the embodiment illustrated in FIG. 2B, data is stored separately for each  
30 profile. Thus, the profiles serve as a filter into a database, namely, information relevant to a users profile is placed into the database at the request of the user. A request by the user in one embodiment includes implied requests based on profile settings provided by the user. Thus, if the user, for example,  
35 has indicated a particular store as a favorite, information

1 regarding the store may be placed in the user's profiles section  
of the database without an explicit command by the user.

5 In an alternate embodiment, the database is more  
conventionally set up in which a record for each data element  
indicates whether the data item is applicable to a particular  
profile. In further embodiments of the database, data is sorted  
in real time based on user profile requests, and no explicit link  
between the profile and the data in the database is provided  
except upon a request.

10 FIG. 3 illustrates a flow diagram of a process of creating  
and populating a profile. In Block 61 the user creates a  
profile. As discussed above, the profile may be a user specific  
profile, a standard profile, or a copied profile. In Block 63 the  
user populates the profile. Populating the profile is analogous  
15 to populating a database linked to the profile. Indeed, in one  
embodiment of the invention populating the profile is population  
of a unique database linked to the profile. In other  
embodiments, however, populating the profile involves linking  
information in a database to the profile, as well as, in some  
20 embodiments, providing information to the database.

FIG. 4 illustrates details of a flow diagram of a process  
of creating a profile. In Block 101 the user selects a type of  
profile. The user may select a new profile, a preselected  
profile, a clone profile, or edit of an existing profile. If the  
25 user selects a new profile the process displays a create new  
profile screen in Block 102. The create new profile screen is  
illustrated in FIG. 5. As illustrated in FIG. 5, the create new  
profile screen includes data entry regions for personal data 51,  
data entry areas for enroute profiles 53, and data entry areas  
30 for favorites 55. Accordingly, in Block 103 of the process of  
FIG. 4, the user enters personal data information requested by  
the create new profile screen. The personal data includes a  
profile name, the age of the user, the sex of the user, and the  
marital status of the user. The personal data additionally  
35

1 includes the occupation of the user, the city of the user, as well as the user's education, religion and children.

In Block 105 the user enters enroute data. The enroute data includes information relating to music, entertainment, sports, services, restaurants, and shopping. In Block 107 the user enters information regarding the users favorites.

If, however, the user selects a preselected profile in Block 101, then in Block 111 the process displays a list of default profiles. The default profiles are profiles for which data has previously been provided. In one embodiment, the data for the default profile is standardized based on age group and sender. For example, college age males have one default profile with standardized information, and male senior citizens have a different default profile with different standardized information. In Block 113 the user selects a default profile.

If in Block 101 the user selects a clone type profile, in Block 121 the process displays a list of existing profiles. FIG. 6 illustrates a screen showing existing profiles for a user. As illustrated, the user has five profiles. The profiles include a default profile 60, an entertainment profile 62, a business profile 64, a shopping profile 66, and a vacation profile 68. For each of the profiles, the user is provided a choice of editing the profile via an edit button or cloning the profile via a clone button.

FIG. 7 illustrates a clone profile screen. The clone profile screen allows for data entry of the profile name 80 and user information 82, as well as modification of the enroute profile 84 and favorites 86. Thus, a clone profile is a copy of a preexisting profile, which may be then edited.

Similarly, FIG. 8 illustrates the result of selecting the edit button of the screen of FIG. 6. As with the clone profile of FIG. 7, via the profile screen allows for edit of the profile information 90, the enroute profile 92, and favorites 94.

FIG. 9 illustrates a flow chart of a process for populating a database. In Block 901 the process determines the method to

1 be used in populating the database. The database may be populated either based on locations at which the PCD becomes relatively immobile, through selection of a route, or through selection of an area.

5 If the stop, or mobility, method is selected the process proceeds to Block 903. In Block 903 the process determines if the PCD has stopped. The PCD is determined to have stopped if the PCD has moved over 500 feet within the past two minutes, but has moved less than 50 feet in the past minute. If the PCD has  
10 stopped the process in Block 905 determines the position, in one embodiment the latitude and longitude, of the stop location and transmits the position to the server. The server in turn responds with an indication of the address of the stop location, as well as any identifying information regarding that address such as  
15 phone number, name of business, or other pertinent information. In addition, optionally the process provides an input screen to allow the user to enter additional information. An example input screen is illustrated in FIG. 13. The input screen includes a name field 1301, and add information button 1303, and a tag  
20 button 1365. Once the information has been either received from the server and/or input by the user, the PCD places a request with the server in response to selection of the tag button to store the information in the user's personal database. The process thereafter returns.

25 If in Block 901 the process determines that the select route method has been selected the process proceeds to Block 907. In Block 907, the process determines the selected route. The route is selected by the user through scrolling of an icon across a map display. The locations corresponding to the map locations form  
30 the route selected by the user. In alternative embodiments, the PCD determines the route using the standard algorithms known in the art based on the starting point/ending point calculations. In further alternative embodiments, the PCD provides a server a starting point and an ending point, and the server determines the  
35 route. The server then provides route information to the PCD.

1 In Block 909 the process determines a series of locations  
corresponding to locations along the selected route. Once the  
process has determined the locations corresponding to locations  
along a selected route the process proceeds to Block 910, in  
5 which the process, as previously described, retrieves and stores  
data into the database.

If in Block 901 the process determines that the select area  
method has been selected, the process proceeds to Block 911. In  
Block 911 the process determines the selected area. The area is  
10 selected by the user through use of a click and drag box on a map  
display. The process also determines locations corresponding to  
those within the click and drag box. The process then proceeds  
to Block 913. As previously described with respect to previously  
discussed Blocks, in Block 913 the process receives information  
15 regarding locations corresponding to the selected area, and  
stores the information in the database. The process then returns.

FIG. 10 illustrates a display screen showing a navigation  
page of the present invention. The display screen provides an  
20 indication of the selected profile 1011, which as illustrated is  
a San Diego(SD) vacation profile. The screen display also  
includes a map display 1013. The map display includes a current  
destination D1 and a final destination D2. The map display also  
includes an indication of items 1015a-c from the favorite menu  
25 within the map display.

The display also includes selection boxes for determining  
a method of transportation 1017. The embodiment described eight  
methods of transportation are selectable. The eight methods of  
transportation are by foot (PED), by air, by water, by rail, by  
30 highway, by subway, by bike and by horse. The method of  
transportation effects both routes and time of travel. For  
example, subways have specific locations from which one may  
ingress and egress, and those locations must be taken into  
account when route selection occurs. In addition, the method of  
35 transportation also affects travel time. For example, traveling

1 from one place to another by foot is likely, depending on traffic, to take longer than travel by car.

5 In one embodiment in the present invention, route selection is also affected by the use of road blocks. Road blocks are locations, selected by the user, which are to be avoided in the selection of many routes. Road blocks may be selected by the user, for example, to avoid areas the user, through personal preference or knowledge, wishing to avoid. For example, a user may desire to avoid certain intersections known the user to  
10 present particular difficulties with travel. Road blocks may also be selected by the user to avoid areas which the user may believe to present danger to the user or the user's property. These areas may be areas of high crime, construction zones, or even areas which are known to the user to present dangerous road driving conditions. In addition, for an automatically selected route, in one embodiment of the invention the user is provided the opportunity to place road blocks along the selected route.

15 Road blocks are illustrated in FIG. 11. FIG. 11 illustrates a user road blocks display screen. The user road blocks display screen includes an automatically selected route to the first destination D1 and a final destination D2. The automatically selected route is indicated by a bold line 1111 in the map display. Along each intersection or along the selected route a selectable button 1113 is displayed. If the user selects the  
20 button the process implements a road block at the selected location and automatically reselects a route to avoid the road block location.

25 In addition, as illustrated in FIG. 11 the user is provided a selection box 1117 to allow selection of certain types of activities more likely to impact traffic. As illustrated, the selection include entertainment, sports, conventions and parades. Selection of any of these items causes the process to determine, based on information available from the Internet service provider, whether such locations should be avoided.  
30  
35

1           FIG. 12 illustrates an enroute profile setting screen. The  
enroute profile setting screen provides two functions. A first  
function is to allow a user to set favorite settings for any  
particular profile. Accordingly, the screen includes a profile  
5   pop down menu 1211 allowing selection of a particular profile.  
The screen also includes button entries for categories  
corresponding to those which appear in the favorite profiles.  
Thus, button menus for music 1213, entertainment 1215, recreation  
1217, restaurants 1219, miscellaneous 1221, shopping 1223, sports  
10   1225, and services 1227 are provided. Each of the categories  
allow for selection of multiple items corresponding to the  
favorites of the user for the particular profile. For example,  
under the restaurants categories the groupings include those for  
fast food, Italian food, French food, American food, and Chinese  
15   food. The user may select one or more of these groupings.

Each of the selected groupings are available for automatic  
database population. For example, if a database is populated  
either through simulation or through actual route travel,  
database population is limited to those corresponding to  
20   groupings selected via the enroute profile settings. In other  
words, users are provided information relating to items which are  
of interests to them along the route they expect to take. This  
allows both for increased targeting of information by businesses,  
which will make themselves known to individuals who may be  
25   interested in their product or service, as well as allowing those  
individuals to filter out information relating to businesses and  
services for which they have no interest.

As additionally indicated in the screen of FIG. 12, users  
may elect to turn off population of the database via a button  
30   menu 1231. This allows the user to avoid excessively populating  
the database in areas the user either will not return to or does  
not expect to stop. Moreover, a pop down selection also is  
provided in the screen of FIG. 12 to allow the user to populate  
the database enroute or merely for the destination 1235.  
35   Population of the database enroute allows the user to locate



1 items of interest or traveling for which the user may desire to  
stop. If the user knows that the user will not stop prior to  
reaching the destination, then the user may elect the destination  
button and thereby only be provided information regarding the  
5 users destination.

FIG. 13 illustrates a screen used by the user to tag a  
location. The tag location screen allows the user to populate  
a database based on either current location or an address located  
on their map. The tag location screen is used when the user is  
10 either at a location or knows of a location for which the user  
desires the information entered into the database. The tag  
location screen is also provided when the user is populating the  
database via the stop method, and the user has additional  
information desired to be entered. This may occur for example,  
15 when a particular business is not provided information to the  
ISP, but the user wishes information provided by way of the user  
entry into the database.

FIG. 14 illustrates a block diagram of a central music  
system. A central music system 1411 is a computerized system  
20 including a processor and memory. The central music system  
additionally includes a modem for communication over a telephone  
network. In other embodiments, as those skilled in the art will  
recognize, the modem may be replaced by a network interface card  
(NIC) or a cable modem, or other similar devices depending on the  
25 communication transport system.

The memory stores information in digital form, including  
audio files. Audio files are files which, when decoded by a  
suitable player, form an audio output stream which may be the  
reading of a book or, for example, music. The audio files store  
30 music in a variety of formats. These formats include .MP3 files,  
.wav files, .aud files, and the like. An .MP3 file is a  
compressed audio file. The audio files are obtained by  
transferring the audio files from an external system to the  
central music system. This may be done via a CD-ROM or disk  
35 reader, or by using the communication modem or the like to

1 download information representing the audio files from the Internet.

In an alternative embodiment, the central music system is a central entertainment system. The central entertainment system is provided visual files and audio visual files in addition to sound files.

Once the audio file is loaded into the central music system, the central music system makes the audio file available to remote nodes. As illustrated in FIG. 14, the remote nodes include an automobile 1413, a first home system 1415, and a second home system 1417. The central music system transfers the music files to the requesting remote node on request. As illustrated, the first home system and the second home system are connected to the central music system via a physical link. The automobile, however, is connected to the central music system via a cellular phone.

The central music system transmits the audio file to the requesting node in the format requested by the requesting node. For example, the first home system may require audio files of a first type and the second home system may require audio files of a second type. Further, the automobile sound system may require audio files of yet a third type. The audio files stored on the central music system, however, may be of yet a fourth type. Thus, the central music system includes a file translation program. The file translation program converts audio files from one file format to another.

FIG. 15 illustrates a process of using the central music system. In block 1511 the central music system downloads or installs an audio file. This occurs in the case of a download by downloading the audio file from another computer system, such as accomplished by downloading from the Internet. Audio files may also be installed onto the central music system through use of a disk or CD-ROM drive.

In block 1513 a central music system organizes the audio files. The organization of audio files is accomplished at the

1 direction of a user. For example, the user may link audio files  
such that a request for a first audio file will additionally  
inform the music system that a second audio file should follow  
the first audio file.

5 In block 1515 the central music system processes a request  
for an audio file. In processing the request for the audio file  
the central music system determines which audio file has been  
requested, as well as any linked audio files additionally  
requested.

10 In block 1517 the central music system determines if any of  
the audio files require translation to a different format. If  
translation of audio files from one format to another format is  
required the process proceeds to block 1519. In block 1519 the  
process translates the audio files. After performing any  
15 operations relating to translation, the process proceeds to block  
1521 and provides the audio files, in the proper format, to the  
requesting node.

Accordingly, the present invention provides a computer  
navigation and media control center. Although these inventions  
20 have been described in certain specific embodiments many  
additional modifications and variations would be apparent to  
those skilled in the art. It is therefore to be understood that  
this invention may be practiced otherwise than as specifically  
described. Thus, the present embodiments of the inventions  
25 should be considered as illustrative and not restrictive, the  
scope of the inventions to be indicated by claims and their  
equivalents supported by this application rather than the  
foregoing description.

1 CLAIMS

1. A method of populating a database comprising:  
determining a tag location;

5 requesting information concerning the tag location; and  
providing the information to a computer system having a  
database residing in a memory.

2. The method of populating a database of claim 1 wherein  
10 determining a tag location comprises:  
evaluating the position of a GPS capable device;  
waiting a preselected time period;  
reevaluating the position of the GPS capable device; and  
determining if the position of the GPS capable device  
15 before and after waiting the preselected time period is  
substantially the same.

3. The method populating a database of claim 1 wherein  
determining a tag location comprises:  
20 presenting a map display using a computer to a user;  
receiving a selected position on the map display.

4. The method of populating a database of claim 1 wherein  
the tag location comprises a plurality of locations.  
25

5. The method of populating a database of claim 4 wherein  
the tag location comprises a selected area.

6. The method of populating a database of claim 5 wherein  
30 requesting information concerning the tag location comprises:  
formatting a request identifying the selected area to a  
server computer system; and  
communicating the request identifying the selected area to  
the server computer system.  
35

1           7.    The method of populating a database of claim 6 wherein  
determining a tag location comprises:

          presenting a map display to a user, the map display  
          providing for selection of an area of the display;

5           receiving an indication of an area selected on the map  
display.

          8.    The method of populating a database of claim 4 wherein  
the tag location comprises a selected area.

10           9.   The method of populating a database of claim 5 wherein  
requesting information concerning the tag location comprises:

          formatting a request identifying the selected area to a  
server computer system; and

15           communicating the request identifying the selected area to  
the server computer system.

          10.   The method of populating a database of claim 6 wherein  
determining a tag location comprises:

20           presenting a map display to a user, the map display  
providing for selection of an area of the display;

          receiving an indication of an area selected on the map  
display.

25           11.   A method of accessing data in a database using a  
profile, the data comprising an indication of a geographic  
location and information regarding the geographic location, a  
subset of the data being associated with the profile, the method  
comprising:

30           receiving a request for data from a database;

          receiving a profile identification associated with the  
request for data from the database;

          forming search criteria for a search of the database, the  
search criteria including details of the request for data

1           and details of a profile identified by the profile  
          identification; and  
          locating data fulfilling the search criteria.

5           12. The method of claim 11 wherein the profile includes  
          user information.

          13. The method of claim 12 wherein the user information  
          includes a user age.

10           14. The method of claim 11 wherein the profile includes  
          items identified as favorites of the user.

15           15. The method of claim 11 wherein the profile includes  
          standard details.

20           16. The method of claim 11 further comprising receiving a  
          request for modification of details of a profile, and modifying  
          the profile in response to the request for modification of  
          details of the profile.

          17. The method of claim 11 wherein each profile is  
          associated with a user.

25           18. The method of claim 17 wherein multiple profiles are  
          associated with a user.

          19. A method of providing information to a user based on  
          the user location, comprising:

30           receiving an indication of the user location;  
          determining data regarding locations approximate the user  
          location; and  
          providing the data to the user.

35           20. A method of modifying a planned route comprising:

1 receiving a route start point;  
receiving a route end point;  
receiving a road block location; and  
determining a route from the route start point to the route  
5 end point avoiding the road block location.

21. A method of determining a route comprising:  
receiving a route start point;  
receiving a route end point;  
10 receiving a mode of transportation; and  
determining a route from the route start point to the route  
end point based on the mode of transportation.

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1                   SYSTEM AND METHOD FOR USER NAVIGATION

ABSTRACT OF THE DISCLOSURE

5       A user profile based navigation system. The navigation  
system stores location centric information in a database  
associated with a user profile. Information from the database  
is provided to users based on a selected user profile, which  
modifies the types of data provided to a user at a geographic  
location. Data in the database is loaded into the database  
10 based on user supplied information and an indication of user  
geographic location.

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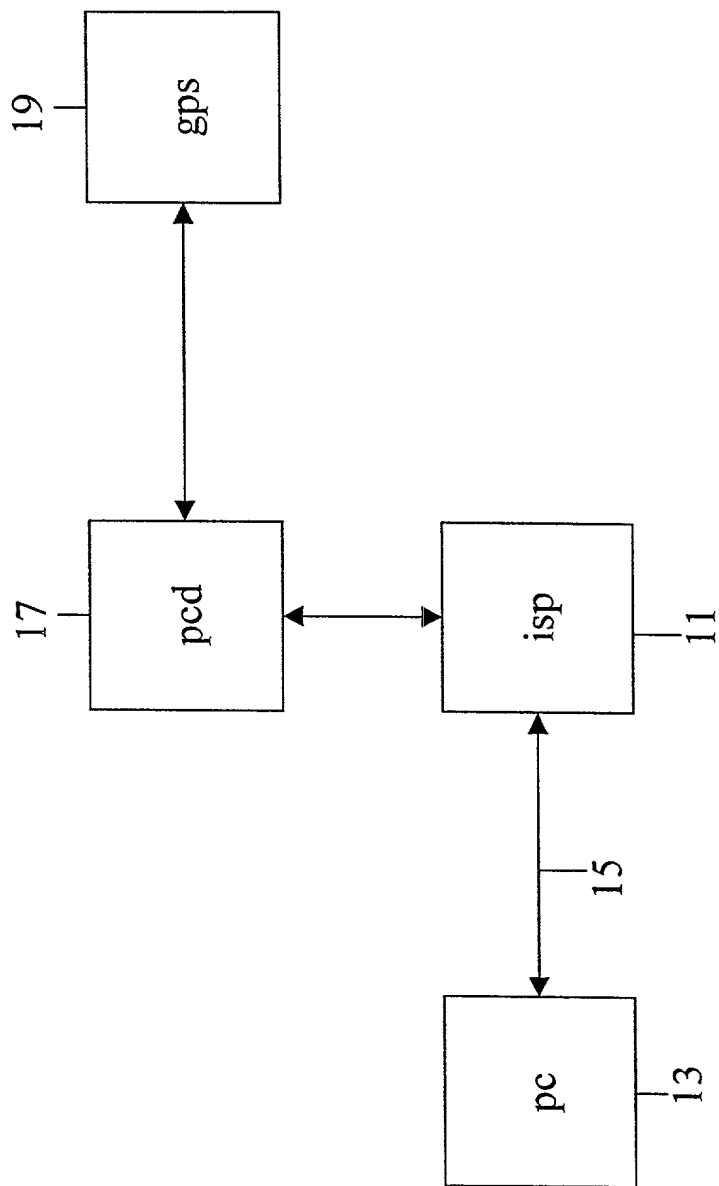


FIGURE 1

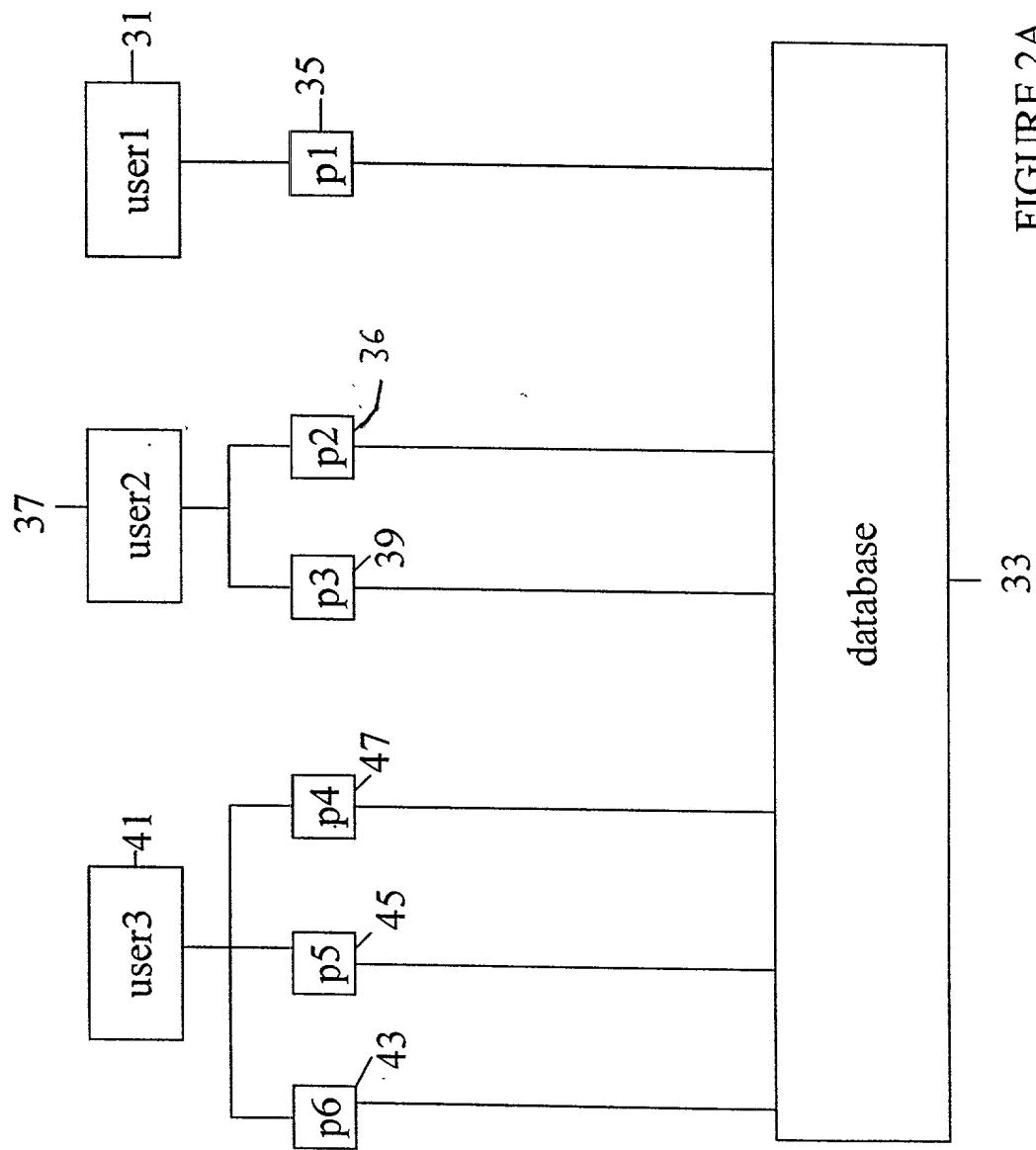


FIGURE 2A

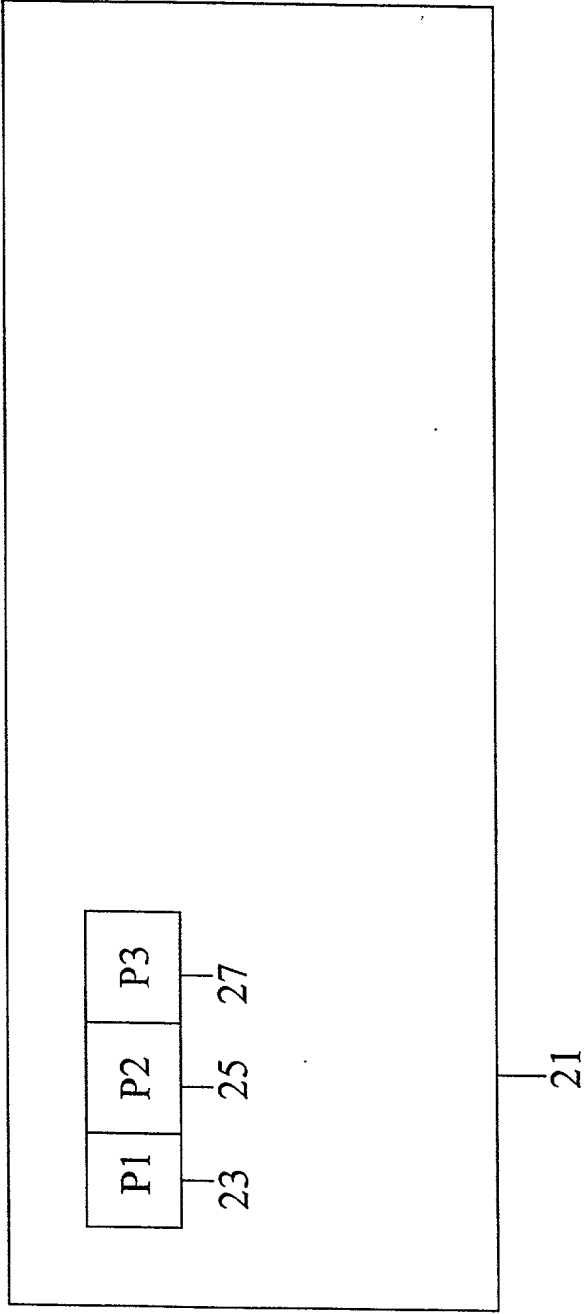


FIGURE 2B

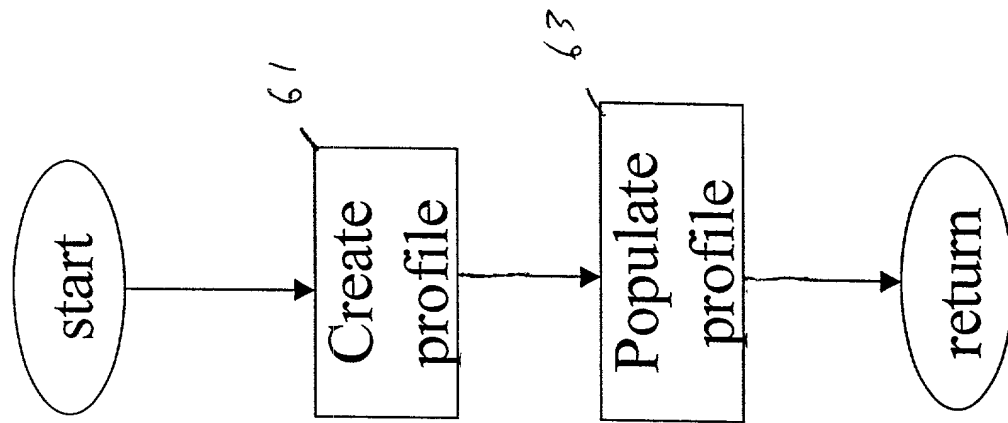


FIGURE 3

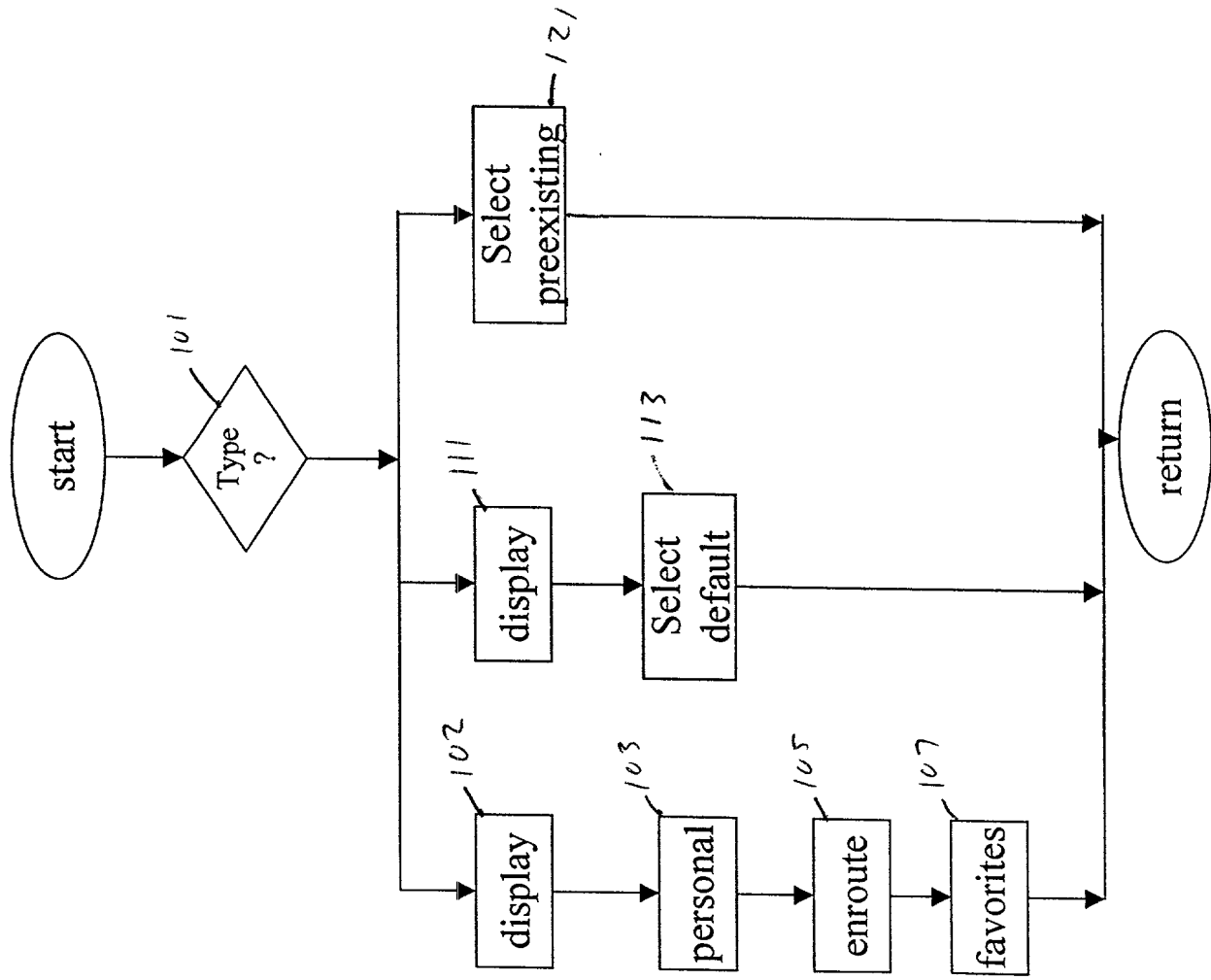
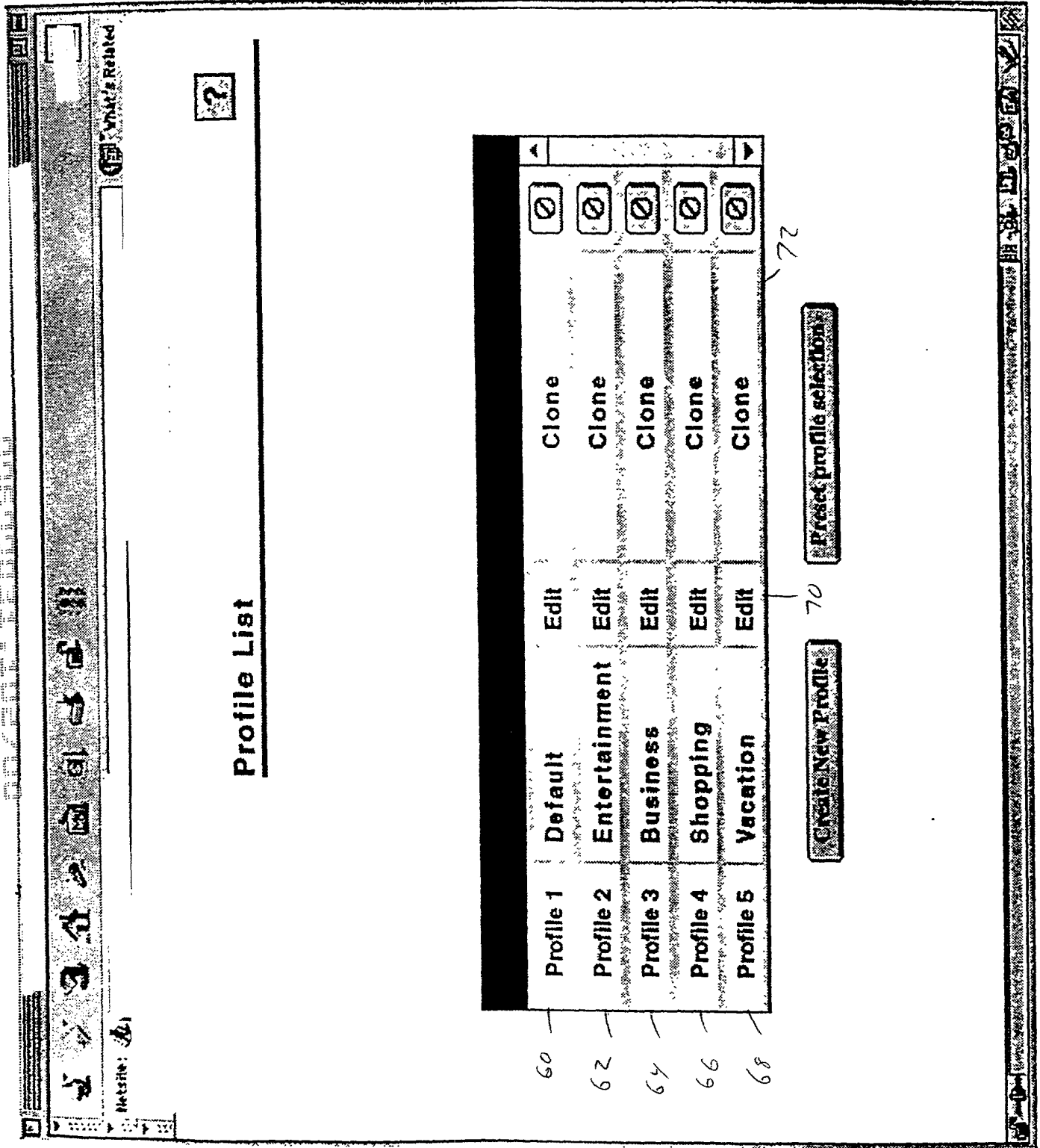



FIGURE 4





NetSite: 

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## Clone Profile

82 →

80 →

84 →

86 →

**Profile name**

**Age**

**Sex**

**Marital status**

**Occupation**

**City**

**Education**

**Religion**

**Children**

**Enroute Profile**

Music Country Jazz

Entertainment Movies Country Concerts

Sports Basketball Golf

Services Automotive Shoe repair

Restaurants Fine dining Fast food

**Edit**

**Favorites**

Home Depot

Wells Fargo

Vons

Chevron

Jack in the...

Comp USA

Sportmart

Macy's

Kmart

**Edit**

**ON OFF** Radius  Miles

**Submit new profile** **Cancel**



Name:

**Edit Profile**

(TEXT)

**Enroute Profile**

**All Favorites**

**Profile name**  
Age  
Sex  
Marital status  
Occupation  
City  
Education  
Religion  
Children

Vacation  
38  
Male  
Single  
Graphic Artist  
Mission Viejo  
College Diploma  
None  
None

Music  
Country  
Jazz  
Entertainment  
Movies  
Country Concerts  
Sports  
Basket ball  
Golf  
Services  
Automotive  
Shoe repair  
Restaurants  
Fine dining  
Fast food

Home Depot  
Wells Fargo  
Vons  
Chevron  
Jack in the...  
Comp USA  
Sportmart  
Macy's  
Kmart

☐ ON ☒ OFF Radius  Miles

**FIGURE 8**

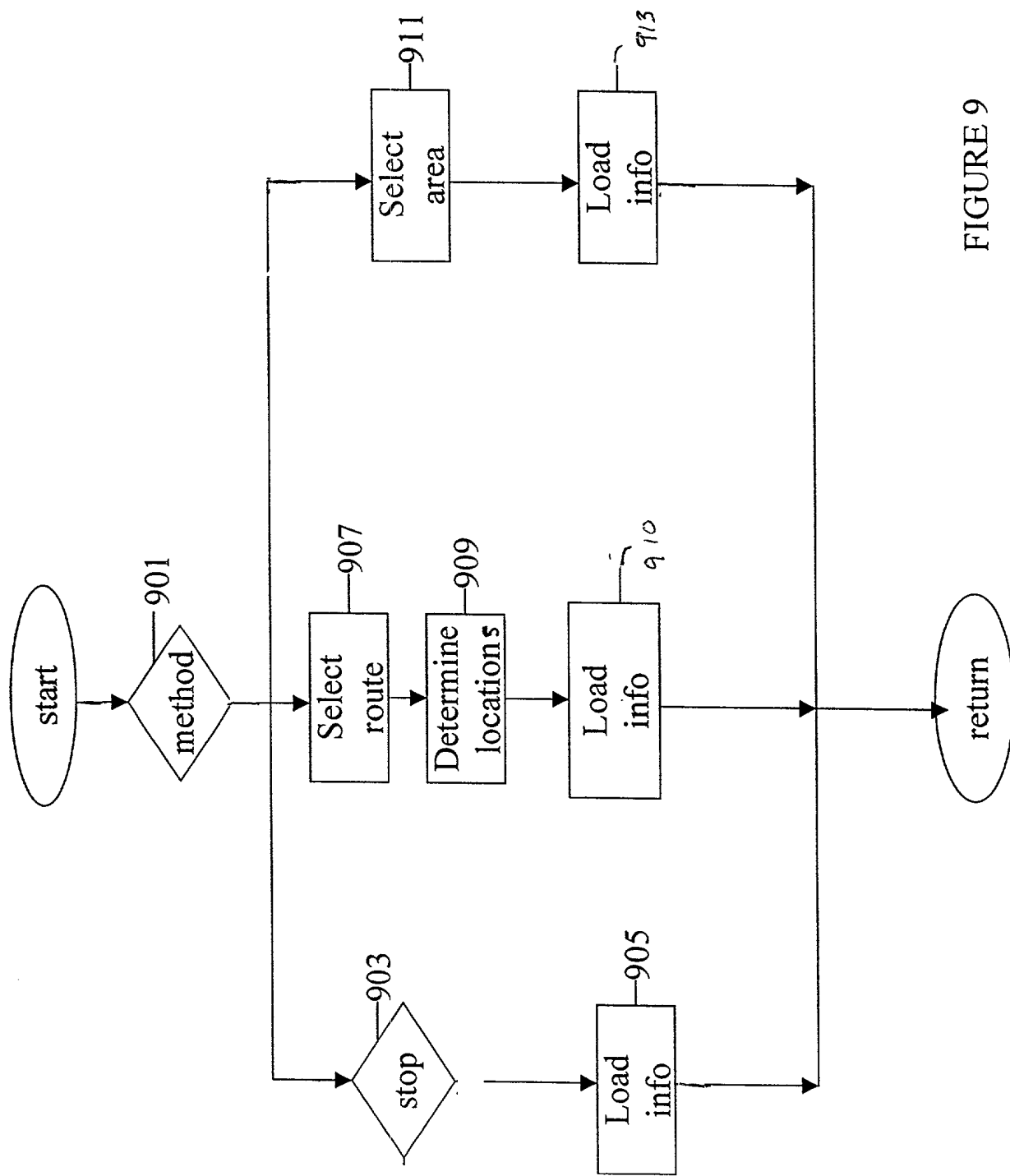


FIGURE 9

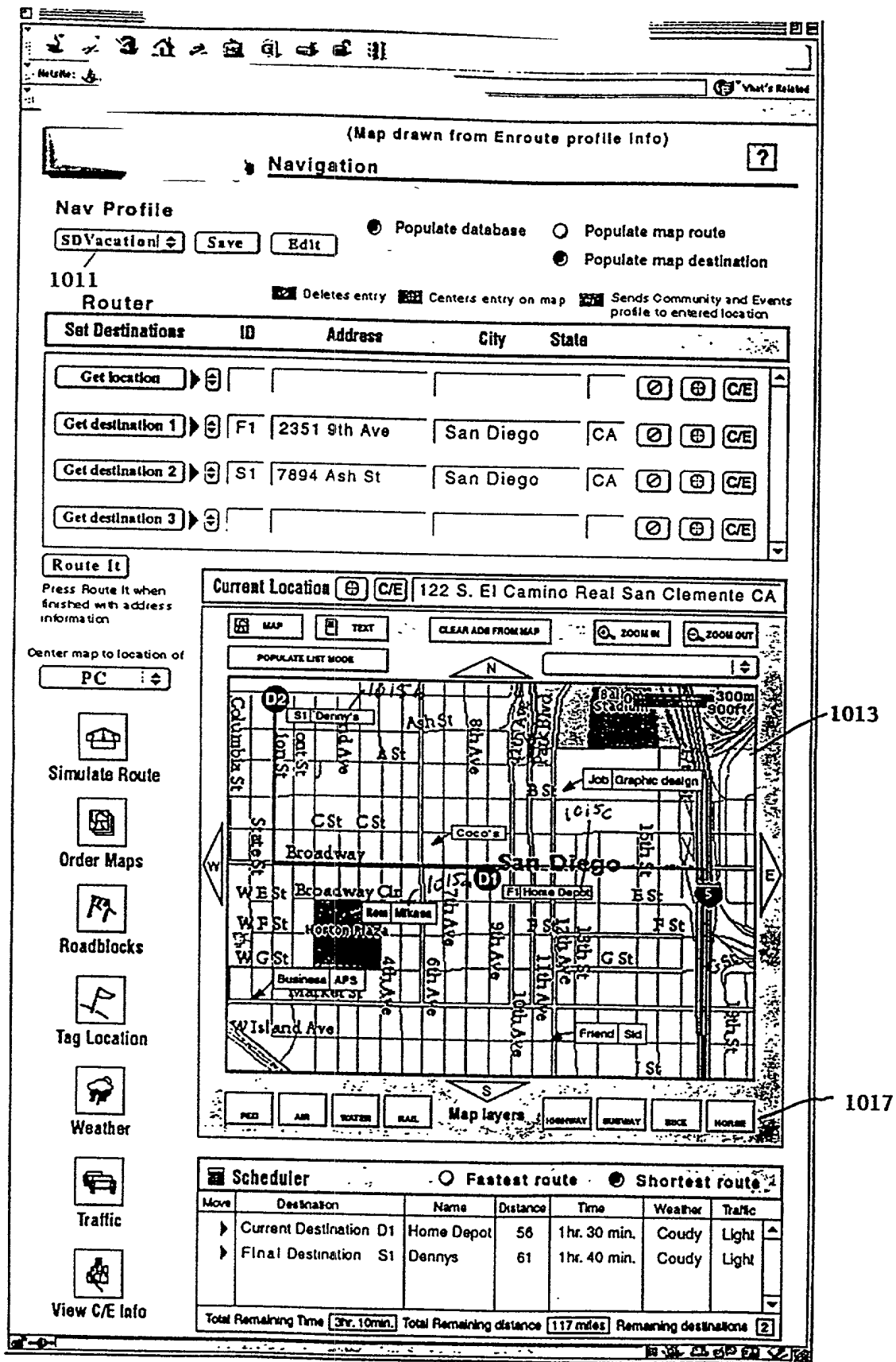


FIGURE 10

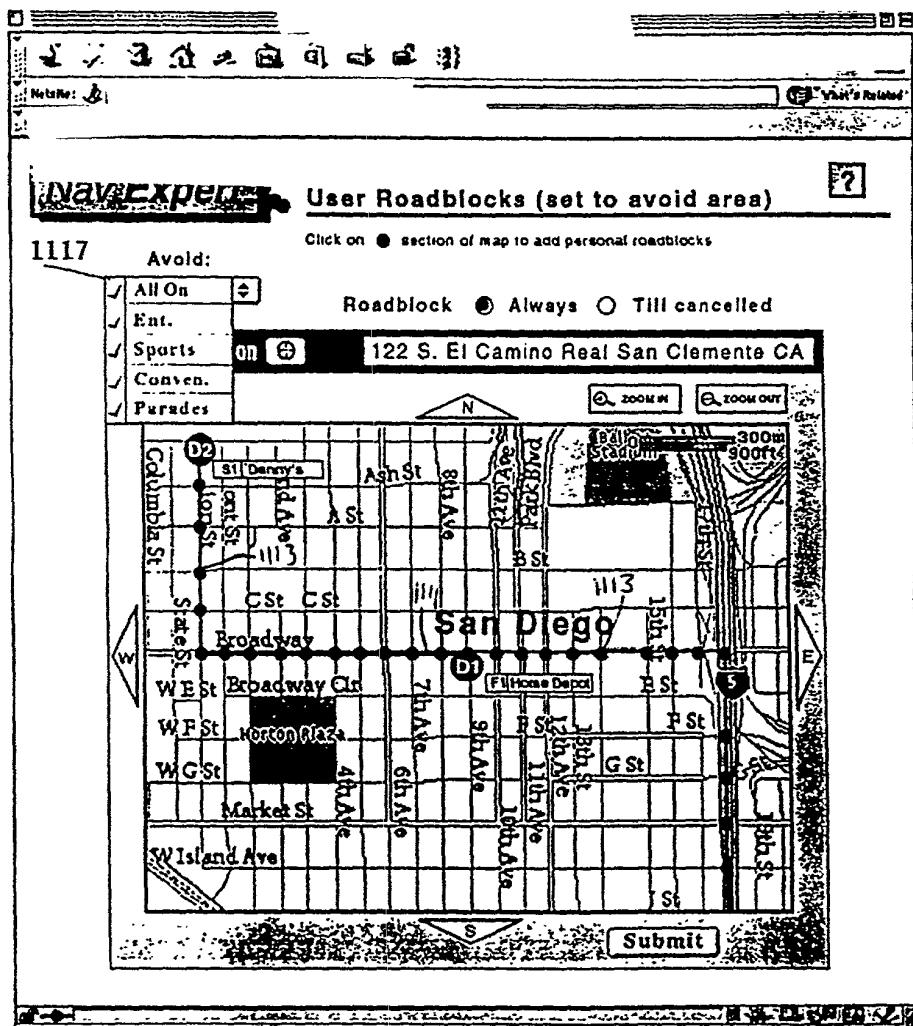


FIGURE 11

Populates database and map while enroute

What's Related

Enroute Profile Settings

Profile

Vacation

Edit

All

On

Off

Enroute

Destination

Settings

Populate My

On

Expert Database

Off

Profile topic

On

chat rooms

Off

Live

On

Saved

Off

Set radius

5 miles

Block

City

County

State

Zip

Shop

Fast Food

Italian

French

American

Chinese

Music

R&B

Rap

Metal

Alternative

Progressive

Classic rock

Country

Jazz

Entertainment

Theatres-live

Theatres

Amuse. parks

Festivals

Carnivals

Concerts

Recreation

Surfing

Camping

Skiing

Hiking

Miniature Golf

Miscellaneous

Stadiums

Rest stops

Churches

Hospitals

Auto dealers

Equestrian

Points of Int.

Shopping

Dept. Stores

Antiques

Mall

Outlet

Sports

Tennis

Football

Baseball

Basket Ball

Hockey

Nascar

Boxing

Soccer

Services

Hotel/motels

Automotive

Rental cars

Airline

Government

Delivery

Grocers

Banks

Friend Finder

Enter name

Enter address

Enter PCO number

Friend 1

Sid Johnson

231 Island San Diego CA

Friend 2

Friend 3

Business Finder

Enter name of business

Enter address

Business 1

APS Design

543 Market St. San Diego CA

Business 2

Business 3

Job Finder

Enter title of employment you are looking for

Job title 1

Graphic design

Job title 2

Job title 3

Item Finder

Enter name/brand of item of item you want to locate

Item 1

Mikasa

Item 2

Item 3

Submit

FIGURE 12

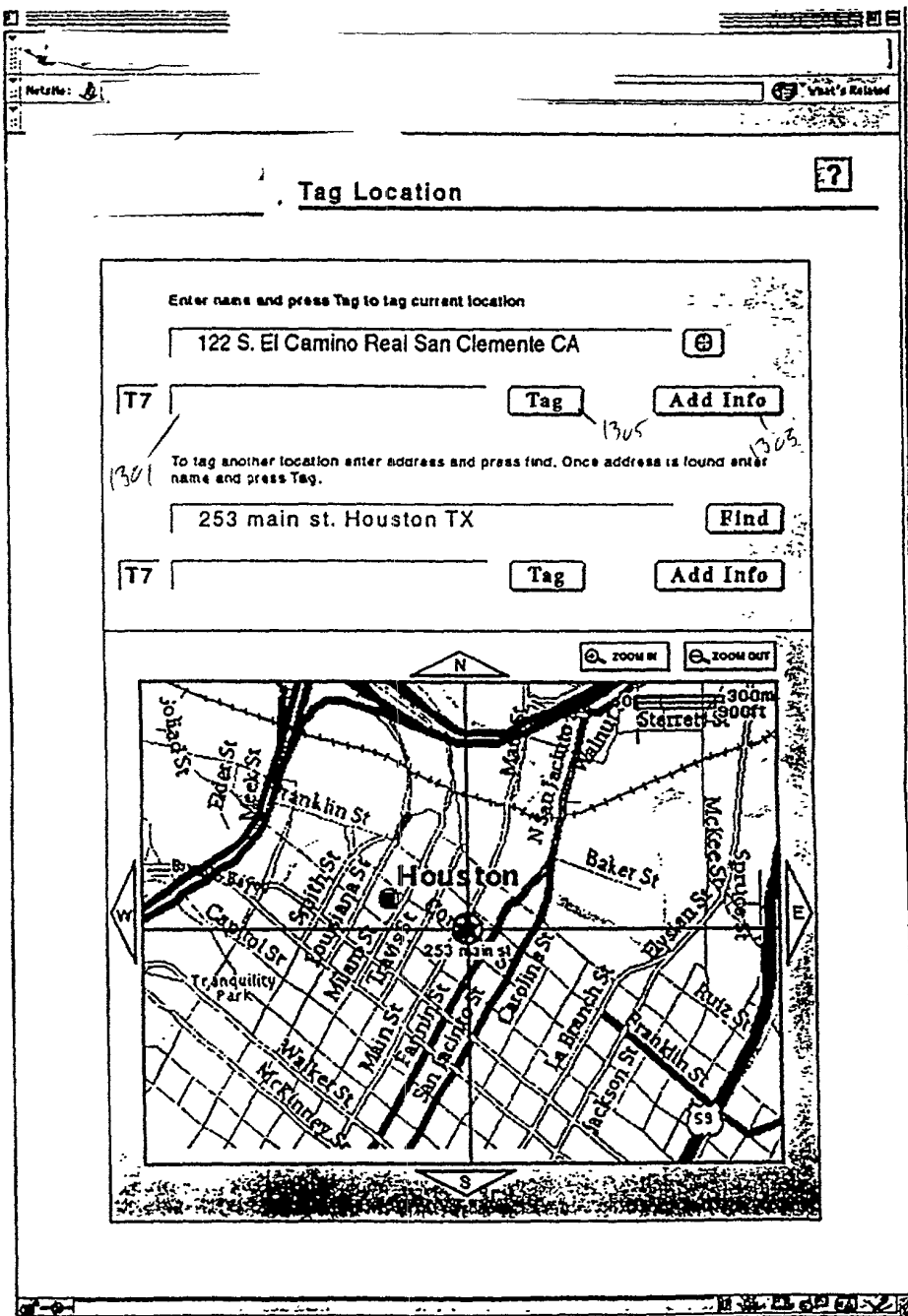


FIGURE 13

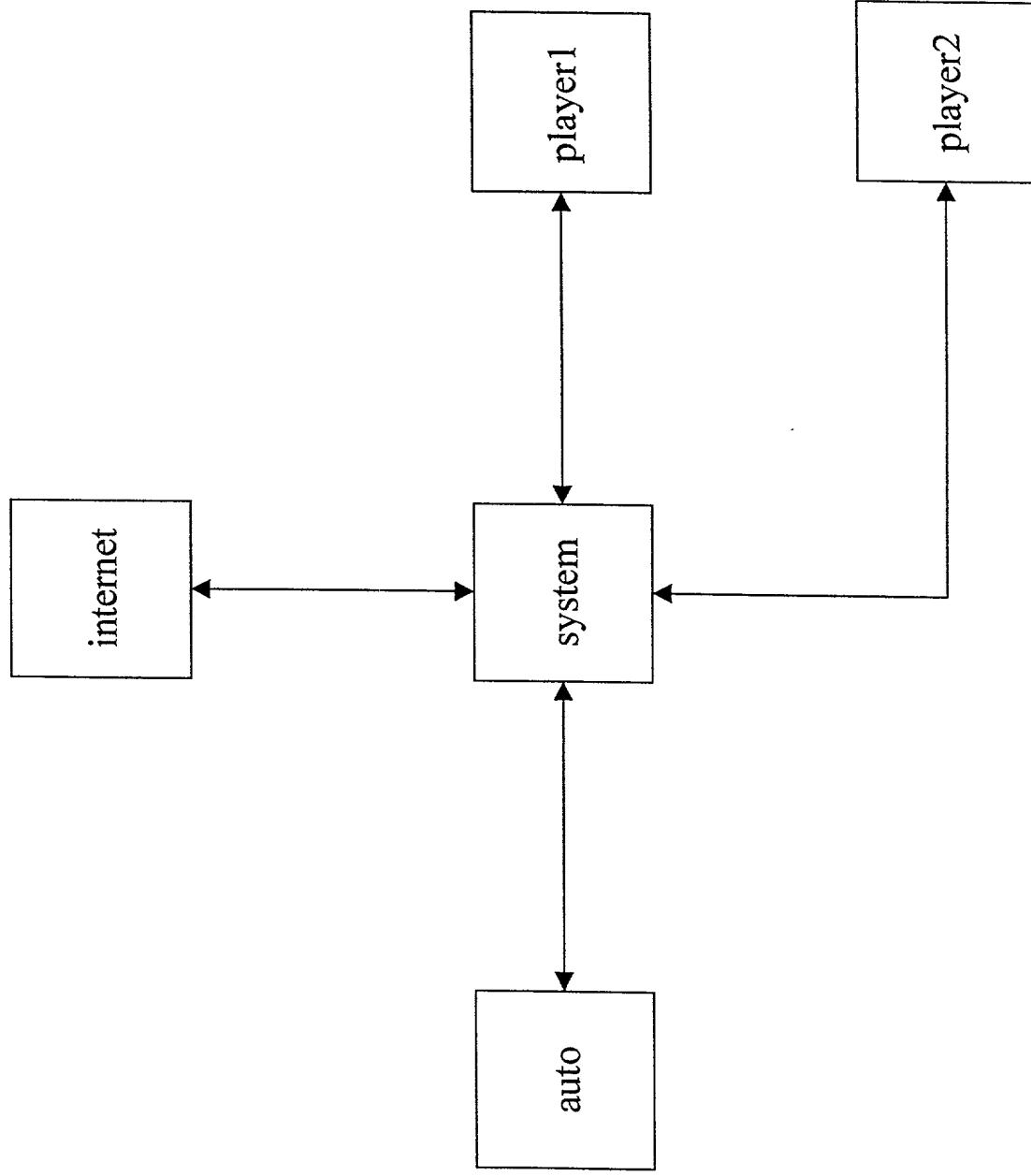


FIGURE 14

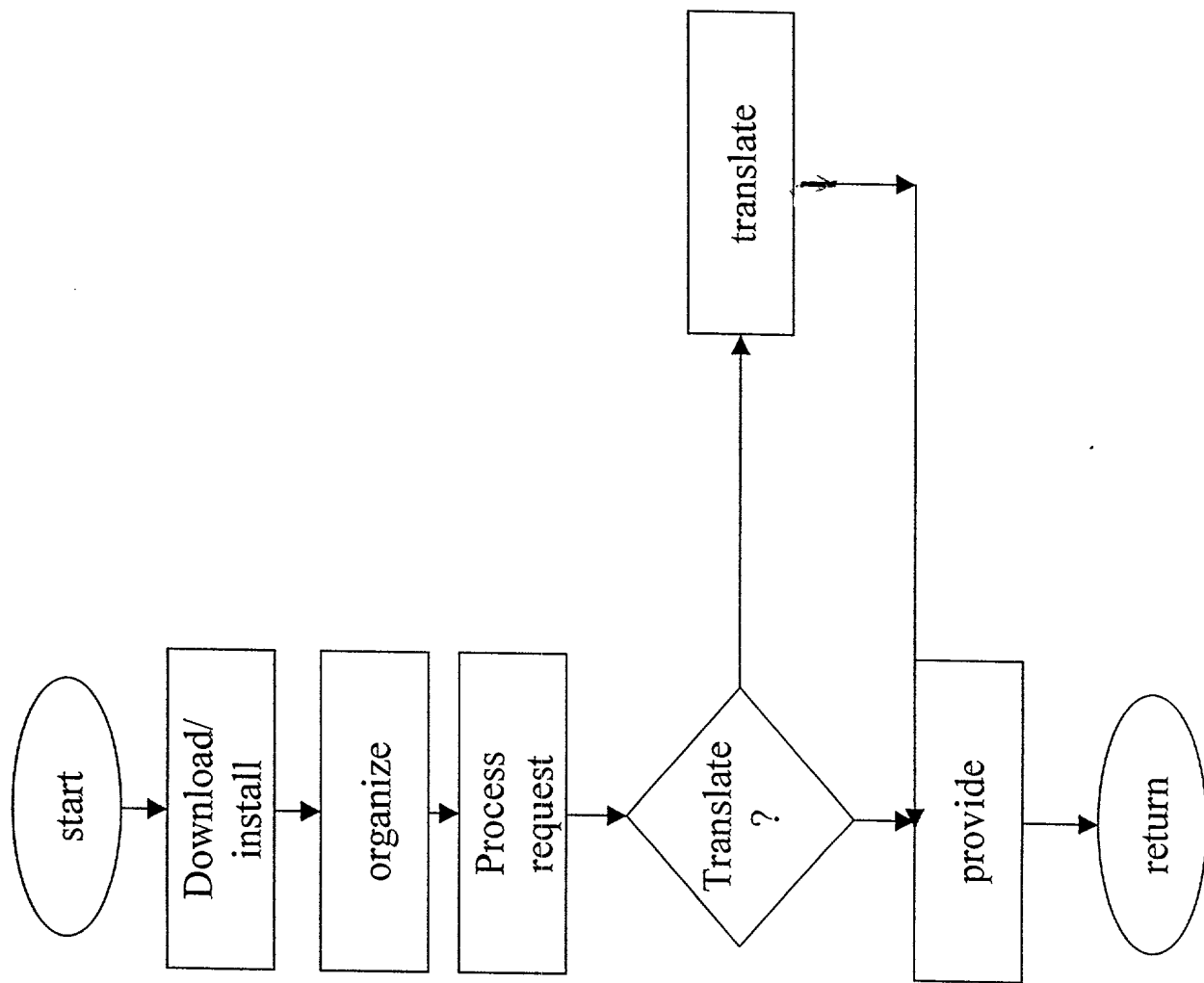


FIGURE 15



**DECLARATION AND POWER OF ATTORNEY  
FOR PATENT APPLICATIONS**

PATENT

Docket No. : 40985/DMC/C685

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled SYSTEM AND METHOD FOR USER NAVIGATION, the specification of which is attached hereto unless the following is checked:

\_\_\_ was filed on \_\_\_ as United States Application Number or PCT International Application Number \_\_\_ and was amended on \_\_\_ (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of the foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)

<u>Application Number</u>	<u>Country</u>	<u>Filing Date (day/month/year)</u>	<u>Priority Claimed</u>
---------------------------	----------------	-------------------------------------	-------------------------

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below.

<u>Application Number</u>	<u>Filing Date</u>
---------------------------	--------------------

60/161,860	October 27, 1999
------------	------------------

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s), or any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application:

<u>Application Number</u>	<u>Filing Date</u>	<u>Patented/Pending/Abandoned</u>
---------------------------	--------------------	-----------------------------------

**POWER OF ATTORNEY:** I hereby appoint the following attorneys and agents of the law firm CHRISTIE, PARKER & HALE, LLP to prosecute this application and any international application under the Patent Cooperation Treaty based on it and to transact all business in the U.S. Patent and Trademark Office connected with either of them in accordance with instructions from the assignee of the entire interest in this application;

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**DECLARATION AND POWER OF ATTORNEY  
FOR PATENT APPLICATIONS**

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**Docket No. 40985/DMC/C685**

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or from the first or sole inventor named below in the event the application is not assigned; or from \_\_ in the event the power granted herein is for an application filed on behalf of a foreign attorney or agent.

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Russell R. Palmer, Jr.	(22,994)	Craig A. Gelfound	(41,032)	Richard J. Paciulan	(28,248)
LeRoy T. Rahn	(20,356)	Syed A. Hasan	(41,057)	Josephine E. Chang	(46,083)
Richard D. Seibel	(22,134)	Kathleen M. Olster	(42,052)	Frank L. Cire	(42,419)
Walter G. Maxwell	(25,355)	Daniel M. Cavanagh	(41,661)	Harold E. Wurst	(22,183)
William P. Christie	(29,371)	Molly A. Holman	(40,022)	Robert A. Green	(28,301)
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The authority under this Power of Attorney of each person named above shall automatically terminate and be revoked upon such person ceasing to be a member or associate of or of counsel to that law firm.

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I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first joint inventor <b>Michael L. Obradovich</b>	Inventor's signature	Date
Residence and Post Office Address <b>1904 Avenida Salvatore, San Clemente, California 92672</b>		Citizenship <b>US</b>

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